



Maine School IPM Fact Sheet

IPM for Wasps, Hornets & Bees



Stinging insects present a special hazard in schools due to the danger of allergic reactions in some people. Below are some guidelines for managing yellowjackets, hornets and bees on school grounds.

Yellowjackets and Hornets

1. **Use good sanitation practices outdoors.** Yellowjackets and other hornets are attracted to food and food odors. Therefore:
 - All trash containers need tight-fitting lids or spring loaded doors.
 - Empty trash frequently, especially during warm months.
 - Wash dumpsters on a regular basis to eliminate spilled food and liquids.
 - Limit food consumption outdoors. Clean up and dispose of trash promptly after outdoor events where food was served.
3. **Use and maintain yellowjacket traps when yellowjackets are active.** Several types are commercially-available. Place near nests and/or near area where yellowjackets are troublesome but not where they can be tampered with by children. Empty traps when full by placing them in freezer or in black plastic bag in the sun for a day to kill trapped yellowjackets, wash in soapy water then refresh the bait.
4. **Seal off openings** in outside walls, playground structures, fences, pipes, etc. to prevent wasps from building nests inside cavities such as hollow fence posts, PVC pipes, meter boxes and wall voids. Do not seal the entrance to an active nest until the colony is destroyed.
5. **Keep people away from nests and traps.** Rope off areas where nests are located, if possible, and instruct children not to disturb nests. Place traps out of childrens' reach. Instruct children not to disturb nests.
6. **Find the Nests.** Nests can be found in the ground (often under shrubs, logs or rock piles), in hollow trees, among branches of trees or shrubs, under eaves, in hollow fencing, playground structures, meter boxes, and in wall voids of buildings. Look for wasps entering and exiting from one of these locations. Ground nests often have bare earth around the entrance. Nests located where they can be avoided do not need to be treated. Yellowjackets and hornet colonies are killed by freezing temperatures in fall and winter and their nests are not reused the following season.



Yellowjacket



Baldfaced Hornet

7. **Remove or Treat Nests** if they are located in areas where disturbance is inevitable or where there is a persistent problem on athletic fields or around outdoor food-service areas.

- Hire a professional to remove or treat nests to avoid risk of stings to students and school staff. Experienced professionals can vacuum nests located indoors or in sensitive areas where pesticides should not be used.
- Maine law requires anyone applying pesticides on school property to be licensed as a commercial applicator EXCEPT when applying ready-to-use general use pesticides by hand or with non-powered equipment to control stinging or biting insects for protection of school occupants. If the above-mentioned steps fail to reduce hornet and yellowjacket problems, use the following procedure to treat the nest with a registered insecticide.
 - Above-ground nests:
 - Treat at night when the entire colony is in the nest. Use an aerosol product (foaming formulations designed to apply a 10-15' long spray are effective). Approach the nest close enough to spray directly into and around the edges of the entrance hole.
 - Ground Nests:
 - Wear protective clothing and veil to avoid stings.
 - During the day, mark main entrance then check for and mark any additional entrances located within 40-50' of the main entrance.
 - After dark, use a 1/2-second blast of aerosol spray (such as 0.3-0.5% pyrethrin) to kill guard wasps at secondary entrance, stuff hole with paper, cover with soil. Apply some of the spray to the main entrance to kill guards, then use a bulb applicator to puff a dust formulation containing bendiocarb, deltamethrin, pyrethrin, or cyfluthrin into the nest. Cover the entrance with moist soil to seal.
 - Do not use gasoline or fuel oil for treatment. It is ineffective and pollutes the soil and ground water.
 - Nests in Wall Voids
 - Wasp colonies can be eliminated using the same procedure for ground nests. After killing and removing the colony, seal the entry way to prevent reinfestation.



Paper Wasp

Bees

Bees are generally mild mannered and usually pose a threat only if handled. They are often found on flowering plants, such as clover, wild flowers and ornamental plantings. Because of their importance as pollinators, it is not advisable to apply pesticides to lawns, athletic fields or ornamental plantings where bees are active. To avoid stings, do not allow children to walk barefooted in these areas. Occasionally, honeybees will 'swarm' to seek a new site for the growing colony. Swarms found on school grounds should be removed by a professional beekeeper.